

## Interoffice Memorandum

---

From: Albert Ruiz-Vela

Date: September 1, 1997

To: Dan Even

Subject: Monthly Report – August 1997  
Product Development  
& Engineering

cc: Mark Clineff  
Glenn Lyon  
Mark Vigna  
Eckhard Vogel  
Steve Tomassi  
Dan Dixon  
Brian Hulan  
Henry Hulan  
  
Farrokh Farzin-Nia  
Mark Payne  
Raymond Thornton  
Ray Wong  
  
Bob Davis  
Ted Driefuss  
Grace Kibler  
Colin Matheson  
Steve Paskin  
  
Tom McCarthy  
Joe Rotino  
Mary Warren

ORMCO CONFIDENTIAL  
AND PROPRIETARY  
INFORMATION –

***DO NOT COPY  
OR DISTRIBUTE***

ORMCO CONFIDENTIAL AND PROPRIETARY INFORMATION

9708\_rec.doc

**ORMCO CONFIDENTIAL AND PROPRIETARY INFORMATION**

ORTHODONTIC PRODUCTS .....	4
NEW PRODUCT DEVELOPMENT ACTIVITIES .....	4
<u>BRACKETS / BUCCAL TUBES</u> .....	4
<i>Alexander Spirit BRACKETS</i> .....	4
<i>SELF LIGATING BRACKET</i> .....	4
<i>BURSTONE Orthos CUSPID BRACKET with HORIZONTAL TUBE</i> .....	4
<i>TOOTH SHAPED PAD</i> .....	5
<i>TAKEMOTO LINGUAL APPLIANCE</i> .....	5
<u>BANDS</u> .....	5
<i>TEXTURED MOLAR BANDS</i> .....	5
<u>INTRA ORAL</u> .....	6
<i>MOLDED Mini-Stick Power Os</i> .....	6
<i>LOW COST RPE</i> .....	6
<i>Orthos LIP BUMPER</i> .....	6
<i>MANDIBULAR ANTERIOR REPOSITIONING APPLIANCE (Dr. Eckhart)</i> .....	7
<i>D.O. MANDIBULAR WIDENING DEVICE</i> .....	7
<u>INSTRUMENTS</u> .....	7
<i>FLUSH CUT DISTAL-END CUTTER</i> .....	7
<u>ADHESIVES</u> .....	8
<i>THICK LIGHT CURE ADHESIVE - Enlight</i> .....	8
RESEARCH AND EXPLORATORY PRODUCT INVESTIGATIONS .....	8
<u>BRACKETS / BUCCAL TUBES</u> .....	8
<i>Orthos CM_F in Spirit MB</i> .....	8
<i>Custom R<sub>c</sub> CUSTOM LABIAL APPLIANCE SYSTEM</i> .....	9
<i>ADHESIVE PRECOAT BRACKETS</i> .....	9
<i>TITANIUM BRACKET</i> .....	10
<i>TITANIUM BUCCAL TUBE - MIM PROCESS</i> .....	10
<i>Wildman LINGUAL BRACKET</i> .....	10
<i>SINGLE-PIECE BRACKET</i> .....	11
<u>BANDS</u> .....	11
<i>TITANIUM BANDS</i> .....	11
<u>WIRE</u> .....	11
<i>TITANIUM ALLOY WIRE</i> .....	11
<i>GOLD ARCHES</i> .....	12
<i>REVERSE-CURVE Copper Ni-Ti ARCHWIRES</i> .....	12
<u>INTRA ORAL</u> .....	12
<i>ORMCO CLASS II JUMPER</i> .....	12
<i>IMPROVED POWER CHAIN</i> .....	13
<u>EXTRA ORAL</u> .....	13
<i>WEDGE-SHAPED NECK STRAP</i> .....	13
<u>SUPPLIES / DISPENSING SYSTEMS</u> .....	13
<i>UNI-BRACKET PACKAGING</i> .....	14
<i>ARCH MEASURING TEMPLATE</i> .....	14
<u>ADHESIVES</u> .....	14
<i>MOISTURE-RESISTANT ADHESIVE</i> .....	14
<i>LINGUAL RETAINER ADHESIVE</i> .....	14
<i>ONE COMPONENT BAND CEMENT</i> .....	15
<u>INSTRUMENTS</u> .....	15
<i>MARA THREE-JAW PLIER</i> .....	15
<i>MARA TORQUE TOOL</i> .....	15
<u>MISCELLANEOUS</u> .....	16
<i>MATERIAL RESEARCH</i> .....	16

**ORMCO CONFIDENTIAL AND PROPRIETARY INFORMATION**

PRODUCT IMPROVEMENT / MANUFACTURING SUPPORT ACTIVITIES.....	16
<i>IMPROVED OPTIMESH</i> .....	16
<i>CE MARKING</i> .....	16
<i>BRACKET PLACEMENT IMPROVEMENT</i> .....	17
<i>AOA (LABORATORY) ENGINEERING SUPPORT</i> .....	<b>Error!</b>
<i>AEZ / ETM INSTRUMENT SUPPORT</i> .....	16
<i>CUSTOM BRAZE</i> .....	17
ENDODONTIC PRODUCTS.....	17
NEW PRODUCT DEVELOPMENT .....	17
<i>Post Remover Kit EIE Endo</i> .....	17
<b>RESEARCH AND EXPLORATORY PRODUCT INVESTIGATIONS .....</b>	<b>18</b>
<i>Buchanan HAND PLUGGER</i> .....	18
MISCELLANEOUS DEPARTMENT ACTIVITIES .....	18
<i>CAPITAL APPROPRIATION REQUESTS</i> .....	18
PRODUCTS CURRENTLY ON INACTIVE STATUS.....	18

**ORMCO CONFIDENTIAL AND PROPRIETARY INFORMATION****ORTHODONTIC PRODUCTS****RESEARCH AND EXPLORATORY PRODUCT INVESTIGATIONS****BRACKETS / BUCCAL TUBES**

*CustomR<sub>x</sub>* CUSTOM LABIAL APPLIANCE SYSTEM (Project 853-E Craig Andreiko/Eric Chapoulaud)

- a. Lab Reopening (Craig Andreiko)
  - 1) Accomplishments / Status
    - ☒ The design software for custom brackets was implemented in the Set-up software. A set of 10 brackets for the uppers 5x5 of the PK Thomas case was calculated. These developments were made necessary in order to attach the bracket to the jig, using real tip values, through a vertical cylindrical slot, which could not be done otherwise.
    - ☒ Software modules were added to our manufacturing program to automatically create a tree assembling the 10 brackets, and create a '.STL' file suitable for the Model Maker wax printer.
    - ☒ Attempt were made to print this tree with the new Model Maker II. Note: The vertical cylindrical slot has a diameter of 0.032 in. It was printed correctly and the support material could be removed easily from it without any manual operation.
  - 2) Goals For September
    - ☐ Create the Lower Jaw case using the newly scanned images. Implement new modules in the set-up programs to create the mandibular set-up and adapt the occlusion with the maxillary set-up.
    - ☐ Successfully print the upper brackets tree and cast it.
    - ☐ Manufacture the new jigs with the new attachment.
    - ☐ Assemble the upper case, using casted brackets and new jigs.
  - 3) Major Project Milestone
    - © 3D JIG Design Review: September 97
- b. 3D Digitizing (Eric Chapoulaud)
  - 1) Accomplishments / Status
    - ☒ According to the plan, a 3D Scan of the PK Thomas case lower Jaw has been acquired, using existing software.
  - 2) Goals For September
    - ☐ Scan a real clinical case using the same software.
  - 3) Major Project Milestone
    - © Clinical case scan: September 97.
- c. Bracket Fabrication (Eric Chapoulaud)
  - 1) Accomplishments / Status

**ORMCO CONFIDENTIAL AND PROPRIETARY INFORMATION**

- ☒ A new Build jet and heated line was sent by Sanders to replace our failing one. After replacement, we have been able to print a tree without any significant problems.
- 2) Goals For September
  - ☐ Upgrade the model maker software.
  - ☐ Print parts to check for accuracy and reliability.
- 3) Major Project Milestone
  - © Reliable printing operation: October 97.